

gallons (c. 56 litres) of water]. As these chemicals control the pest and the plant lice as well, these methods are widely followed by the cultivators. They have been advised to handle the chemicals with care as they are poisonous and to stop the application a month before the harvest of the crop to eliminate residue hazards. An insecticidal trial with a view to control the pest effectively without any residual effect, as it is a vegetable crop, is worth pursuing.

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20. *SYNGAMIA ABRUPTALIS* WALKER (PYRALIDAE— LEPIDOPTERA): A NEW PEST OF *MENTHA VIRIDIS* L. IN SOUTH INDIA

INTRODUCTION

Mentha viridis L. (Labiatae) (Tam. *Podina*) is a small perennial herb commonly grown in kitchen gardens and used for seasoning many culinary preparations. The thick, fleshy leaves are used for making *chutneys*, for flavouring soups, salads, etc. It has a medicinal value and has been used for curing hysteria and some infantile troubles. So far no insect has been noted as doing any marked damage to the plant. Recently, however, the caterpillars of

the moth *Syngamia abruptalis* Walker were observed causing the withering of the plants on a large scale in the orchard attached to the Agricultural College and Research Institute, Coimbatore. Since it is recorded here for the first time, the observations made are given below.

PREVIOUS RECORDS

Lefroy (1909) noted the insect on *Ocimum sanctum* L. (Tam. *Thulasi*). It has, however, not appeared in any large proportions on this plant. No further information is available on this insect from India. Shroff (1919) mentioned it as 'not a serious pest' on the leaves of mint, in Burma. According to Zacker (1913) it is a leaf-feeding pest of cotton, in Africa.

CHARACTERISTICS OF THE INSECT

The caterpillar folds the leaf in a characteristic way and feeds inside. The edges of the leaf are brought together and folded along the midrib in the longitudinal axis. The edges are united by silk filaments, and the doubled leaf is seen as a flat one. Many leaves in the terminal shoot are also loosely webbed with stray strands of silk. The caterpillar rests near the midrib with its head pointing towards the stem, and scrapes the parenchyma in the inner portion of the folded leaf, leaving the lower epidermal portion intact. It attacks 2 or 3 leaves in the same branch before it attains full growth. The folded skeletonised leaves gradually wither away. Consequently, the branch where it has been feeding dies. Two or three caterpillars have been noticed on different leaves in the same branch.

The fully-grown caterpillar measures 22 mm. in length. The head capsule is light yellow to light brown in colour. The body is pale green in the young stage, but turns yellowish later. Black spots with hairs are present on the dorso-lateral aspect in the thoracic and the first 8 abdominal segments. There are also short hairs arising singly in other portions of the body. On disturbance the caterpillars move quickly in jerks and hang on silken threads. Just before pupation red patches are developed around the dark spots on the body.

Pupation takes place inside the leaf-fold in a white cocoon made of a few strands of silk. The pupa is brown, about 8.5 mm. in length, and is attached to the leaf by the anal end.

